

ABSTRACT OF THE DISCLOSURE

Porous media filters are commonly cleaned by backwashing. Immediately following the backwashing process, a high concentration of contaminant(s) pass through the filter, which is a phenomenon know as filter “ripening” or maturation in the municipal water treatment community. A new process has been invented that can reduce the concentration of contaminants that pass through a filter during “ripening” and is called the extended terminal subfluidization wash (ETSW). ETSW is a new backwashing process for porous media filters that involves using a washwater flow rate below the minimum fluidization velocity of at least some of the filter media grains following the primary cleaning stage of backwashing (e.g., fluidization) for an amount of time sufficient to displace the majority of the water volume in the filter during the overflow portion of the backwashing process.